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ABSTRACT

This series of nine articles on dyslexia, or specific language disability, originally appeared in the Baltimore "Evening Sun" in response to increasing public interest regarding reading disabilities and handicaps. These articles summarize the methods of identifying and teaching these children and discuss the school's common failure to identify and teach them. One article deals with the differing views in existing knowledge of dyslexia and other language disabilities. Several case histories are presented, and the series culminates with an overview of current methods of research and education on the local level. (Author/TO)

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Evening Sun
Baltimore, Md.
Feb., 1971

— DYSLEXIA: WHAT IS IT? —

One Child In Seven Possesses Handicap In Ability To Read

This is the first in a series of nine articles on dyslexia, or specific language disability, presented in response to increasing public interest and specific inquiries recently directed to Direct Line.

The series attempts to provide information on some of the ways in which dyslexic youngsters are being identified and taught (or not identified and not taught). One article deals with the differing views in existing knowledge. Others present case histories and current methods of research and education on the local level.

PART I

By Josephine Novak

"Eight million children in American elementary and secondary schools today will not learn to read adequately. One child in seven is handicapped in his ability to acquire essential reading skills."

This somber statement, now much publicized, was contained in the preface of the Department of Health, Education and Welfare Report of 1969 on Dyslexia and Related Reading Disorders.

The government statement continued: "This phenomenon pervades all segments of our society, black and white, boys and girls, the poor and the affluent."

Dyslexia has been defined as a disorder in children who, despite conventional classroom experience, fail to attain the language skills of reading, writing and spelling commensurate with their intellectual abilities.

The child with dyslexia, or specific language disability, may be found at any intellectual level but he usually has normal, potentially normal or superior mental ability.

His particular difficulty lies in his inability to deal with letters and words as symbols, with resultant disminished ability to integrate the meaningfulness of written material.

Dyslexic children are turning up in increasing numbers in our schools, not because there are proportionately more of them than there used to be, but because there are more children in the classroom and the nature of our educational goals requires that they be noticed.

In other times, a child with specific language disability might have dropped out of school after only one or two failures, found a niche for himself in the mainstream of society, and may even have gone on to greatness in some field of endeavor.

But today, with our ever increasing emphasis on high academic standards, the youngster who can't read, write or spell stands in jeopardy.

Estimates vary considerably on the number of American school children who may be dyslexic, but many authorities believe that 10 per cent is a conservative estimate.

There is agreement at this point that a child with specific language disability needs to be taught to read, write and spell by methods and procedures which are different from the conventional teaching methods as we know them.

Little Agreement

There is little agreement on the causes and the characteristics of dyslexia, even though it has been under study by the medical fraternity for more than 80 years.

According to Dr. Macdonald Critchley in "the Dyslexic Child," the first published report on dyslexia appeared in 1887.

In "Reading Disability": Developmental Dyslexia," a definitive book on the problem by Dr. Lloyd J. Thompson, professor emeritus of clinical psychiatry at the School of Medicine, University of North Carolina, the following characteristics are listed as being frequently present in some combination in children with language difficulties:

1. Their attainments in reading is considerably below that expected for their mental age and their years of schooling and is often below their achievement in arithmetic.

2. They show no evidence of any significant impairment of vision or hearing, or braindamage, or primary personality deviation, or any history thereof.

3. They show great difficulty in remembering whole-word patterns and do not learn easily by the "sight method" of reading. They tend to confuse small words which are similar in general configuration.

4. They are poor oral readers and fundamentally poor

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spellers, although they can sometimes retain memorized lists of spelling words for varying lengths of time.

5. In their early attempts at reading and writing, they show marked confusions in remembering the orientation of letters b, d, p, g, and the order of letters in words or numbers in sequences, as in the words "saw-was, on-no, felt-left," or as in numbers "12-21."

6. They usually show some evidence of delayed or incomplete establishment of one-sided motor preference (unilateral cerebral dominance). They tend to be left-handed or ambidextrous or mixed in their motor choices, e.g., right-handed and left-eyed, or they may have been slow in the establishment of their handedness.

7. They often show delays or defects in more than one language area. In addition to poor reading, they may have delayed or imperfect speech, a poor ear for words, a poor oral vocabulary, or clumsiness in handwriting or in other motor acts.

8. They usually come from families in which there is left-handedness or language disorders, or both.

9. They are three or four times as apt to be boys as girls.

Roger E. Saunders, who heads the graduate reading program at Loyola College as associate professor and is a clinical psychologist and teacher in the field of language disabilities, points out that one of the important things to remember about this or any other list of characteristics is that dyslexia is not an all-or-none phenomenon.

"It exists to a varying degree. Sometimes the symptoms are more noticeable in writing or spelling than in reading," he explains.

"Sometimes it is in vocabulary and, in other instances, it is in all areas dealing with language."

Specific Techniques

Teaching methods which appear to be most effective are specific techniques applied to specific deficits.

"In the rehabilitation of children with severe reading disabilities," Mr. Saunders says, "it is necessary to almost teach the hands to read. You make the memory stick by using more sensory-oriented ways of teaching so that if a child can't recall what a word looks like, he remembers what is sounds like and what it feels like, and this helps him to remember what it looks like.

"The sad part is that children with specific language disability get so mislabeled. Many of them are particularly bright, even brilliant, yet the teacher thinks laziness or lack of interest is what is keeping them from doing their homework, when the truth of the matter is, they can't do their homework.

"It is vastly important that the difficulties of these children be recognized early and diagnosed correctly so that proper teaching can prevent failure and all the psychological ramifications which failure brings about."

TOMMORROW: Long-standing confusion

DYSLEXIA: What Is It?

Remedial Lag Partly Blamed On Confusion About Dyslexia

This is the second in a series of nine articles on dyslexia, or specific language disability.

PART II

By Josephine Novak

At least part of the laxity in providing adequate special education for the child with specific language disability is due to the long-standing confusion surrounding dyslexia and other learning disabilities.

The very definition for dyslexia seems to change according to the group discussing it, so even though the term is in common use, and by derivation simply means disorder of reading, it has fallen into disrepute.

Obviously, the word sounds frightening to a parent, and to the average layman it has no recognizable meaning.

But, in addition, there has been so much disagreement within the scientific and professional community concerning the symptoms which define the "dyslexic" child and the possible cause or causes of his difficulties, that the word has become "loaded" with different meanings for different people.

To compound the situation, dyslexia, or specific language disability (preferred term), has also been known by a bewildering array of other names, including word blindness, strephosymbolia (from two Greek words meaning twisted symbols), mirror reading, developmental reading disability, and central processing disfunctions.

Crucial Gaps

The latter term coined to encompass all children with learning disabilities, evolued from a two-year study by the University of Illinois, sponsored by the National Institute of Neurological Diseases and Stroke—The purpose of this work (published 1969) was not only to summarize current information, but also to point out crucial gaps in the present status of knowledge for those who try to relate the research findings of experimental child psychology, clinical education and psychology, and the medical profession.

In the preface to the final report resulting from this study, Dr. Richard L. Masland, director of NINDS, pointed out the project was a remarkable piece of work in its exposure that "Wide gaps of knowledge exist in every area, and one is almost overwhelmed by the questions in need of elucidation.

"The final summary of research needs highlights the chaotic state of our current efforts in this field. We are dealing with a poorly defined population. The methods for early recognition of the children with learning difficulties are still be to be worked out and tested.

"There is no standard or generally accepted systematic screening program through which every child could be tested for a learning disability.

"The characterization of the individual deficit is on a very superficial basis, with the emphasis dependent largely upon the basis of one or another special school of thought.

Shaky Methods

"Remedial methods are found to rest on varied and shaky hypotheses, and have rarely been subjected to scientific evaluation even on an empirical basis."

Within this chaotic situation, dyslexia is in the position of being a language disorder lumped under the category of "specific learning disabilities" along with disorders which include such conditions as brain injury, minimal brain disfunction, and developmental aphasia.

Purists admit the overlap between reading and learning disabilities, but argue that the particular difficulty of the dyslexic is in the language and that in other areas, such as math, he is often superior and can learn as well as the average child once he overcomes the language problem.

The result, from the standpoint of educators who are trying to help youngsters with severe reading problems, is involvement in a tangled network of complexity.

Add to this the fact that any school system has a host of children with reading difficulties resulting from environmental causes, including poor teaching, poor class attendance, emotional problems and societal pressures. And there is always the mother who thinks her child is not reading as well as he should be.

What It It?

The average teacher tends to throw up her hands in dismay. Dyslexic? How do I teach this child? What does it mean anyhow?—if indeed she ever heard of it, because there is considerable resistance to the term within the educational framework.

During a recent discussion with Eloise O. Calkins, who was education program adviser for the National Advisory Committee on Dyslexia and Related Disorders, and is now with President Nixon's "Right to Read" program, Mrs. Calkins made the remark that "labeling children, which has to be done in terms of various programs funded for them, carries with it the difficulty that the teacher may feel she is inadequate to meet the child's particular problem.

"She hears the word dyslexia as if it were leprosy or something. So there are times when not enough is being done that could be done due, partly, to this general reluctance to use the term within the academic framework.

"It all depends on which books you read. If you read medical books you will see it defined. But if you read educational journals you might think it doesn't exist."

Educators argue that in the course of more than three-quarters of a century no one has been able to learn the cause of dyslexia or or even state unequivocally that there is one homogenous group which falls into this category.

Can Learn

This leaves a few dedicated people who work within a particular definition for dyslexia to cope with educating these children and to prove, against great odds, that regardless of the cause of their difficulties, they can and do learn to read, write and spell.

The shortage of qualified people is acute, with the result that remedial procedures, if applied at all, are usually not begun until the child is in fact a failure.

Assuming a diligent search, parents who can afford to pay will find private help.

The question is, how long do they remain on the waiting list. If they are unlucky they can go down the wrong pathways with tutoring involving random techniques which not only may not help, but, in some instances, may actually cause the child to regress.

And parents can find themselves in the doctor's office with compounded problems resulting from a youngster's bewilderment by his failure to read.

Tomorrow: One Mother's Dilemma.

—Dyslexia: What Is It?—

Early Discovery Offers Major Step Forward

This is the third in a series of nine articles on dyslexia, or specific language disability.

PART III

By Josephine Novak

Barry is 9 now, and he is in Charlotte, N.C., attending a private boarding school for children with specific language disability.

"He is happy there," his mother said, "that is, as happy as he can be under the circumstances. He misses being at home with the family, and we miss him, terribly.

"The point is, my husband and I feel that if Barry had been tested early he wouldn't have had to be away from home."

Looking back, Barry's mother, Mrs. Roger Hill, of Baltimore county, says that Barry was always an outgoing child, very gregarious, "into everything."

Was Hyperactive

"He was a big child, very awkward, and he never played with things that took a fine hand or had to be put together. I misconstrued this and always felt he was clumsy because he was a large child with big muscles."

When he was four, Barry went to nursery school and his mother was told he was hyperactive. At the time she felt this was completely normal for a little boy and that he would outgrow it. He was her third child (she has four boys) and she thought she knew something about children.

At the end of his kindergarten year, the report came home that Barry was not ready for 1st grade, that he seemed immature .Mrs. Hill (not her real name) then had him tested at the private school where one of her other children was enrolled, and the private school officials agreed: Barry was definitely not ready for 1st grade.

"They showed me the test. If I had known something about dyslexia then, I might have guessed—Barry couldn't duplicate a circle or square; all his numbers were backwards; there was no association."

However, both the dean of admissions and the family pediatrician felt that because Barry was such a big child it would be best that he enter 1st grade in a public school and be retested at a later date for the private school.

He went into the district school and lasted seven days.

"After seven days the teacher called and told me the child was not ready for first grade. But my husband was not willing to accept this. He asked the school to wait two weeks while I tutored Barry to see if that would help. At the end of two weeks, when there was no change. Barry went back to kindergarten.

A Relief

"On his part, it was almost with relief because he couldn't cope with the situation."

Again, the mother was told he was immature, and as the year progressed there was still no change.

Mrs. Hill took Barry to two psychologists. One told her he had a very low IQ and that he was slow. "Not mentally retarded, just slow, and that I should treat him as if he were three years younger than he was and never expect anything from him."

The second psychologist said Barry was immature, but that in another year the family could expect to see a change for the better.

That spring, Barry was retested at the private school and once more rejected for immaturity.

"This had to be the beginning of a big boost of frustration that would 'overpower him," his mother said. "His older brother was attending that school and yet he was rejected—twice."

By that summer, Mrs. Hill knew something was really wrong. Barry was then 7. He still did not know his numbers, nor the days of the week. "He didn't know anything," and in the fall he would again be going into the 1st grade.

The Hills engaged Mrs. Frank Locke, who at the time was a reading supervisor with Baltimore county, to tutor Barry during the summer.

Mrs. Locke worked with the youngster for one week and then called his mother and asked to see her.

"Do you know why the child can't learn?" she asked. "He has dyslexia.

What Is It?

"My God," the mother recounts. "Dyslexia? And the first thing that flashed through my mind was, 'What part of the body is that?' "

Mrs. Locke worked with Barry every day through the summer, tutoring him basically in concepts; i.e., up-down right-left, because Barry was completely disoriented in space.

In the fall, he re-entered 1st grade for the second time, and every day, after school, he was still being tutored. He couldn't learn.

In February, when he was ill for a few days, his mother asked for his math lessons. The lessons involved the con-

cept one more-one less. Mrs. Hill was startled to learn Barry couldn't read the words "more" and "less," and therefore his papers were totally wrong.

"This was another area of frustration. Surely he was thinking: "Everybody else can do it: why can't I" His one hour of tutoring every day was marvelous, but not enough to compensate for the six hours he was in school.

"And then he began to take out his frustrations in emotional ways. His behavior at home was impossible.

"In the evenings he would pick up his books and throw them at me. He tore his playthings apart. In order to take him to school, it was necessary to pick him up bodily and put him in the car."

Youngest Son

Mrs. Locke, at this time, tested the Hills' youngest son, Joey, who was 5. And the mother says, "I knew enough by then to be suspicious. I was hoping that it wouldn't be so, and I had been fighting it. But underneaath it all, I knew: Joey was also dyslexic.

Joey started kindergarten, and Mrs. Locke began to tutor him immediately.

Barry began to see Roger Saunders, clinical psychologist, whose particular commitment is to the treatment of dyslexic children .After completing his evaluation Mr. Saunders told the Hills that Barry's IQ was about 110, slightly above average in some areas, but average in most.

"By then," Mrs. Hill explained, "there was a feeling on the part of the child that nothing he did would get approval from the family, yet here was a man who accepted him for what he was. Mr. Saunders became his only friend. Barry was devoted to him, and he saw him regularly during the next two years.

"But that year was disastrous as far as his behavior was concerned. He had no time for play. He went to school at 8.10 A.M. and after school he was tutored by Mr. Saunders. We didn't see him at home until 6 P.M. It was decided to send him to school for only a half a day but, by then, it was obvious that academically he could not remain in this situation.

Transferred

The Hills applied to the Baltimore county board of Education for Barry's transfer out of his school district in order to

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Discovering Dyslexia Early Means A Major Step

[Continued From Page B 1]

be sent to Rodgers Forge where there was a special class for children with severe reading problems.

"It took a long time and a lot of fighting, until finally they understood and realized this had to be done. The child simply could not take another year of regular schooling."

In September Barry went into the second grade at Rodgers Forge, and Joey repeated kindergarten there.

Barry did fairly well at his new school, but while his remediation in learning was coming along, his emotional problems stemming from his earlier years of frustration began to mount.

It became obvious," Mrs. Hill said, "that even though he was now being given the best help available in Baltimore county, it was not enough for him."

After discussing the situation with everybody involved, the Hills decided to send Barry to the special boarding school for dyslexic children, where he is now.

He is doing well, his mother reports, "and is proud of the fact that he can spell, read and write. Learning the language still doesn't come easily. To spell a word correctly, he must still spell it aloud before writing it, but he is happy because he feels successful now. The school has 28 students and 8 teachers, but it is costing a lot of money.

Tommy is now in the first grade at Rodgers Forge and is also doing well because the school has one class at every grade level for children with learning problems. Tommy's problem lies more in the auditory area. That is, he hears words but translates the sounds differently. He is being tutored four time a week, and the parents attribute his progress to the fact that he was tested at an early age.

Tomorrow:—One young man's struggle with dyslexia.

· Dyslexia: What Is It? ·

Youth Fights Deficiency With Skills, Talents

This is the fourth in a series of nine articles on dyslexia, or specific language disability.

PART IV

By Josephine Novak

Robert Wells, 18, will graduate this year from a Baltimore county public high school.

He is good-looking and well-built, and is a star football player, having made all county for the past two years. He excels at lacrosse and skiing.

Bob has taken and passed the SATS entrance tests for college, and he knows he has the talent and skills necessary to pursue a career in architecture, his chosen field. Money is no problem; his family is well-to-do.

But he is dyslexic. His reading level is about mid-6th grade. At this point he is extremely anxious and worried about coping with education on the college level.

"It is very discouraging," he said recently, "And the schools have never done anything much to help me."

Wasn't Learning

Bob attended a private school in Baltimore county through second grade. When it became obvious he wasn't learning to read, he was placed in a public school and set back to the same grade.

"I can remember, even then. I couldn't participate in spelling bees because I had this problem, but nobody knew about it. My parents hired tutors, and the tutors, my parents, and I practiced reading all through the weekends.

"When they gave quizzes at school, I felt I must be really dumb. The teacher would actually say, 'You're dumb' or 'You're not doing your homework'. They didn't know, and my parents didn't know. So I almost had to conclude I was dumb."

He vaguely recalls some special assistance in reading when he was in the 5th grade.

"From what I can remember, we read stories and read aloud. But I don't think they had any knowledge of my problem, or how to attack it. The trouble is, a teacher finds out a kid is a slow reader and she decides he is either dumb or he has some kind of family problem. So they just stick him in a room with a bunch of other kids who can't read and they read out loud to each other.

Fortunately, at this time, Bob came to the attention of the principal of the elementary school he was attending—an outstanding teacher who took an interest in him and found the time to give him his tests orally. It was through his good oral grades that he was allowed to enter the junior high program.

He was still in elementary school, when after experiencing complete frustration and even set-backs due to an assortment of "tutors," he was sent to a clinical psychologist who specializes in dyslexia.

The psychologist recommended first, that Bob be sent to a summer camp for dyslexic children in Pennsylvania, where the teacher-pupil ratio was 1-1 and where special teaching methods for remediating dyslexia were employed.

"That helped," Bob recalls, and then for a full year he was seen by the clinical psychologist who helped him get through his feelings of inferiority and gain a new respect for himself.

"He attacked the problem in an entirely different way from the tutors, but when he started working with me, I really think I was too old. I had already formed habits of reading, and there's just not a whole lot you can do then. I mean they ought to give tests in the schools to find out if a child is dyslexic even before he tackles reading so he can learn the right way.

"But nobody knew about it in my case, so I coped with it my own way, and it just didn't work out. Right now I can't do a whole lot with it."

He is learning, however, that books on records can be of great help to him.

"The recorded books are really great," he contends. "Now I can listen to things, and I really like books and stories. I do read the newspaper every day, but even at that level it is still slow going.

Still Can't Read

"It doesn't matter how easy the words are. When I see written words I can't take them in fast. They might be words I've seen a million times, but I still can't remember them and I read choppy and slow.

"I like writing. My big problem with writing is in putting down words I can't spell. And when I'm writing to people, sometimes I leave out a phrase or a word. I think faster than my hand can write it

down, and all of a sudden I skip one phrase or thought without knowing I haven't written it down.

Bob was allowed to take the SATS test for college orally after being certified as dyslexic, a procedure utilized by the blind as well as the handicapped.

While his vocabulary tested below average, his math score was high enough to carry him to a passing grade.

Before entering his final high school year, he decided to have at least one of his textbooks put on records by "Recordings for the Blind" in New York. This decision culminated in still another frustrating experience. As he tells it:

"At the beginning of last summer, I went to the school to find out what books I would have so I could get them recorded. They told me they hadn't made up the schedule so they couldn't tell me who my teachers would be, and that teachers often used different books.

Had To Wait

"So I had to wait until September and then it took about two months to get the records. By that time we were nearly finished using the textbook. Now I have this book on six tapes, which took a lot of somebody's time, and I can't use it."

And he says: "I like art, and I like working with my hands, like designing. I know I'm not dumb; but it's funny, I still have a complex. The first thing people say when they see me trying to read is, 'Boy, are you dumb'. It makes me feel they have no understanding of what I've gone through and how I can do other things.

"I went to all my teachers at the beginning of this year and tried to explain to them about my reading. Not one of them was aware of just what it is. A few that had heard about dyslexia just thought it was a reading problem.

"I know they don't know the extent of it because they never asked me to read to them to find out. My English teacher, who is a very smart person and she of all people should know about it, thought it was a problem of writing backwards and that all I needed was a mirror to turn the words around.

Missed A Lot

"The impression everybody gets is that I didn't practice reading when I was younger. The fact is, I tried as hard as I could. It has really been a sad thing to go through, because I know I've missed a lot by not being able to read.

"This kind of problem puts a lot of pressures on you. You have to go through a lot and work much harder than other kids. It's interesting to think of how I would have done if I had been the equal of everybody else and still fought the way I've had to fight.

"I have been fighting all my life just to stay equal with everybody. It would be great if a first grader who has dyslexia could get the chance to use his ability. I think, really, it ought to be done."

Tomorrow: Unnoticed Dyslexic.

Dyslexia: What Is It?

Despite Lag In Reading

He's Working For Degree

PART V

This is fifth in a series of nine articles on dyslexia, or specific language disability.

By Josephine Novak

Eugene Ayer is a thoughtful, sensitive young man of 31 who succeeded in graduating from high school at 19, has a diploma in fine arts, and is slowly working toward a fine arts degree.

His reading and spelling level is mid-fifth grade.

About a year ago, after reading a newspaper article about children who have difficulty in learning to read, write and spell, Eugene referred himself to a clinical psychologist who specializes in treating specific learning disabilities.

He described himself as a person who had never been good at reading (Ayer is not his real name), and he said he felt the need for a proper evaluation before seeking some type of special educational help.

Clinical intelligence tests given to him at that time (age 30), revealed that in areas dealing with common sense, logic and abstract reasoning, Gene's basic intellectual ranges were in a very superior level when compared with other adults his own age.

His full-scale I.Q. registered "above average."

Yet in spite of his intelligence and his graduation from high school, his tests revealed that he called the word "parlor" "parole"; "tarnish" to him was "transit."

He pronounced "aboard" as "broad," "residence" as "resistence," "municipal" as "multiple," "humidity" as "humanity" "intrigue" as "intruder." His oral reading was choppy and contained errors which would have caused the meaning to be obscured.

His spelling made the psychologist feel that Gene had no concept of the relationship between the sound and the symbol in language and that he relied heavily on a visual memory for whole-word patterns, particularly for multi-syllable words.

The dictated word "train" was written "trained"; "grown" was "grone"; "kitchen" was "kitten"; "brief" was "breast"; "occupy" was "occupated"; and "institute" was "insistute."

Lacks Knowledge

Gene's computational arithmetic indicated that he lacks basic knowledge of higher multiplication tables and is unsure of fractions and percentages.

His handwriting was fast and neat when he copied from print, suggesting no problems in this area. And his memory for designs test suggested a perfect performance when he dealt with designs which are not essentially language symbols.

The psychologist's impression was that Gene has had a long-standing disability in the language and-or learning area. The interpretation was that he evidently has an intellectual potential which he has been unable to fully employ in academic pursuits.

Gene is a nice-looking young man who makes a fine impression. For four years, until recently, he taught art on a volunteer basis to inner city children at a Saturday school conducted by a Catholic church. The school has been temporarily closed, but Gene hopes it will reopen soon because he feels "these kids need help."

He makes his living as a commercial artist and wants to make fine arts his profession.

"I paint every night," he says.

He prefers oils and acrylics and is beginning to sell a few of his paintings although he has not yet had a major show.

Alumni Board

He is on the alumni board of Maryland Institute and he is still attending night classes at the institute, where he is taking about one course a semester, working toward his degree in fine arts.

"I'm taking it slowly because of my problem," he says, "but the thing is, the courses I'm taking keep me oriented to what is going on in the world.

"I'm interested in everything and I particularly like philosophy and religion. I do read, but slowly; and I can't just sit down and read books.

"It's so unfortunate that nobody ever picked this up (dyslexia)."

Gene is pleased that he now has access to recorded books.

Among the books on records he mentioned having listened to were art history books, "Catch 22," "Malcolm X" and a book on Aristotle.

"But I still would like to take some special course. I'm sure I could do better. Suppose I wanted to go into the business end of commercial art where you depend so much on the written language?"

Lacks Knowledge

As to how he got through high school, (three years in a Catholic high school and two in a public high school) Gene says: "I can remember back in the third grade (parochial school), the teacher said my problem was 'nothing to worry about', that 'some children are slower than others.'

"I guess I was a good student in the sense that I was always there, and I tried. And I guess a lot of times I passed on my efforts rather than on what I really knew.

"But I was always petrified of being called on to read in class. The inner frustration is the big thing that you deal with and have to cope with. The point is, this problem should be recognized at an early age.

"In a way I was lucky because I have wonderful parents and brothers and sisters. No one in the family ever belittled me, and my parents never compared one child with another, even though I was always very low in my grades.

"Instead, they directed me into art, which I was good in, and my feeling is that I was really saved by that direction.

"If I had not been encouraged to take up art, I feel that by now I would have been some kind of very disturbed misfit."

Tomorrow: Some areas of research.

Dyslexia: What Is It?

Theories Proposed For Causes Of Dyslexia

This is the sixth in a series of nine articles on dyslexia, or specific language disability.

PART VI

By Josephine Novak

Many questions are still to be answered by the medical fraternity before the causes of dyslexia are well understood.

Among the theories, and there are many, is Dr. Lauretta Bender's suggestion, in 1958, that dyslexia involves a maturational lag in neurological development and language skills.

Dr. Bender, neuropsychiatrist and originator of the Bender Gestalt test for perceptual functioning, suggests a hereditary basis for her theory, which has not been explicitly tested.

The actual processes through which we read and write are not yet completely clear.

Imaginative Areas

It is known that in practically all right-handed people and in possibly 30 per cent or more of left-handed people, the left hemisphere of the brain does all the work that has to do with language (speech, reading, writing, spelling), while the right hemisphere of the brain seems to be the silent partner or nondominant in language functions.

All the things that the right half does are not entirely plain; it seems to be the half which deals with music, art, spatial orientation and other imaginative areas.

In some left-handers and the occasional right hander, the reverse is true; the right side is dominant and the left is the silent partner.

In studies published in 1925 and 1937, Dr. Samuel Torrey Orton, American neuropsychiatrist, suggested that dyslexic children show poorly established cerebral dominance, resulting in confusion in the selection of correct memory images during reading.

Dr. Orton felt that in children with specific language disabilities there was an intermixture of control in the two hemispheres of the brain due to the failure of one hemisphere to establish dominance over the other.

He also noted that in the families of children he studied there was more than the expected number of left handers and persons with delayed speech, stuttering, reading, writing and spelling disabilities and abnormal clumsiness.

He concluded that such findings might be looked upon as evidence of the absence of a sufficiently strong hereditary tendency to establish a clear-cut selective preference for one side.

Refined Techniques

As yet no one has proved this theory, but researchers hope this issue can be resolved finally, through the use of more refined techniques for measuring cerebral dominance.

Proved or not, Mrs. Margaret B. Rawson, of Frederick, who has taught dyslexics successfully for over 35 years, bases certain remedial procedures on this suggestion, with excellent results.

Cerebral dominance does not appear to be fairly established, Mrs. Rawson says, until ages 5, 6 or 7 but if not established by that time may cause trouble.

Mrs. Rawson feels that by teaching a child through methods that use all pathways (ears, eyes and hands, all learning at the same time), the child begins to establish good habits of attending to

what goes on in the dominant hemisphere.

"We are not certain that this is what happens," she says, "but we do know that if a child has learned in this manner he is more likely to be secure in reading and even in spelling and writing."

Several important recent studies support the position that a definite genetic component might be involved in dyslexia.

Dr. Macdonald Critchley, British neurologist, is one of the latest authorities on this point of view.

Dr. Barton Childs, professor of pediatrics, Johns Hopkins Hospital, and Mrs. Brenda Sladen, geneticist, Hopkins School of Hygiene and Public Health, are both interested in research from the genetic standpoint.

Genetic Approach

Mrs. Sladen has recently published a preliminary paper in support of this approach.

"The way in which it may be inherited," she said, "is difficult to prove.

"But if it is inherited, there is a possibility that dyslexia could be called a polymorphism, which means there are at least two distinct variants of the same character in the population—those with a fine memory for writing symbols and those without this capacity.

"The point is, both these forms would not occur at high frequencies unless they were both useful.

"It is a good hypothesis to work on that the dyslexic person has many characteristics that have been a great advantage, so this may be the reason it occurs with such frequency.

"Dyslexic children are so often the very active type who are particularly aware of everything going on around them.

"Many of them tend to be good leaders, often intelligent, and have persistent natures. But even when dyslexia is overcome they always remain slow readers and poor spellers.

"In my opinion, at least 10 per cent of the people are not the book learning type, but it has been shown over and over again that a carefully taught dyslexic child, as an adult, can achieve as much as anyone else."

DYSLEXIA: What Is It?

Follow-Up Study Shows Academic Success, Justifies Optimism For Dyslexic Student

This is the seventh in a series of nine articles on dyslexia, or specific language disability.

PART VII

By Josephine Novak

In 1968, the Johns Hopkins Press published a statistical yet personal, longitudinal study by Margaret B. Rawson titled, "Developmental Language Disability: Adult Accomplishments of Dyslexic Boys."

The Rawsons were among the planners of The School in Rose Valley, Pa., which their first child entered in 1930.

Mrs. Rawson, language consultant-teacher in private practice and former assistant professor of sociology at Hood College, worked for The School in Rose Valley from 1930 to 1947 in several capacities, including that of psychol ogist, social worker, classroom teacher and language therapist.

Dyslexic Boys

Her book is a follow-up study made in 1964-1965 of 56 youngsters who attended this private elementary school during the period 1930-1947 when she was on the staff.

Among the group were 20 dyslexic boys who had received special remedial teaching according to the Orton-Gillingham-Stillman approach.

Mrs. Rawson found that these 20 boys, by 1964-1965, had earned 18 college and 14 graduate degrees, and 18 were ranked by their occupations in the two highest socio-economic classes—the evidence showing that dyslexics cannot be judged to be poor risks on the basis of language disability alone.

For most of these boys, Mrs. Rawson pointed out, any advice to keep their educational and occupational sights low would have been entirely inappropriate.

And she added, "If this work (the study) generates the optimism which it seems to justify, then clinicians, teachers, parents, and especially the present day young dyslexic students should feel both more hopeful and more eager to tackle the problem of specific language disability."

Two of the boys had become medical doctors, and two, research scientists (non-medical). There were two college professors (one a department head), a lawyer, three owners of medium business, three employed in middle management, one school principal, three secondary school teachers (one with an M.A.; two with a B.A.), an actor in regular employment under contract, a factory foreman, and a skilled laborer in training.

Orton-Gillingham

The Orton-Gillingham-Stillman remedial approach used at The School in Rose Valley evolved from the work of the late Dr. Samuel T. Orton who was a professor of neurology and neuropathology at Columbia.

Dr. Orton was the neurological adviser for Miss Anna Gillingham and Miss Bessie Stillman who, as teachers, were frustrated in their attempts to cope with children who could not read and spell adequately but were otherwise normal.

The result of their joint efforts was a structured sequence of remedial procedures first published in the mid 1930's as a manual titled "Remedial Training for Children with Specific Disability in Reading, Spelling and Penmanship."

Since Miss Gillingham's death, there have been modifications and adaptations of the method as well as additions of new supplementary materials.

"There are many ways of implementing methods for teaching children with low language facility," Mrs. Rawson says. "The Orton-Gillingham approach is thorough and systematic, but if someone wants to use another method, I say fine, as long as it is also well-conceived and structured and can be introduced early and used consistently to achieve results.

Particular Needs

"It is important to find out what a particular child needs, how he is made up, what he is like, and then determine how we can present the language to him in a way in which he can learn."

At a recent international dyslexia seminar held in Indianapolis and attended by leading ophthalmologists as well as doctors directly involved in research in the diagnosis and treatment of dyslexic children, the participants concluded that just how children with reading disabilities should be

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taught is a technical problem in educational science, which lies outside the competency of the medical profession.

Those attending the seminar agreed that what the medical profession could do for the dyslexic child is to establish an interdisciplinary approach to analyzing his problem.

Here in Baltimore, the Hopkins-affiliated John F. Kennedy Institute is about to open a pilot clinic for children 7 through 9 who are believed to be dyslexic.

After referral to the Institute (by teacher, parent, physician, etc.) the child will undergo physical, psychological and neurological examinations to determine if he best fits the term dyslexic; i.e., a youngster of normal intelligence, with senses intact, who is reading far below expectations in the conventional classroom.

Special Class

If initial testing places the child in this category, he will then be given a number of other tests, including reading, and speech evaluations, and genetic and metabolic tests through which Dr. Robert H.

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QUIZ—This geography paper was produced by a dyslexic boy in 6th grade who tested superior in intelligence.

A. Haslam, director of Kennedy Institute hopes to launch an all-out research attack on the problem.

Initially, 10 of the children will be enrolled in a special class at Kennedy in which a variety of educational techniques will be tried in an effort to determine effective ways of reaching each child.

If results prove encouraging, Dr. Haslam hopes to add more classes for additional children and to eventually approach the disability below the age of 7, working down towards the crib.

Dr. John Guthrie, who will be in charge of treatment, expects to be working with many people in the State whose interest is special education.

Tomorrow: Breakthroughs in Education

DYSLEXIA: What Is It?

Schools Are Pushing Programs To Correct Language Disability

This is the eighth in a series of nine articles on dyslexia, or specific language disability.

PART VIII
By Josephine Novak

Slowly, changes in education to accommodate the language disabled are coming about.

Schools of education are being challenged, particularly through government-sponsored studies, to innovate their teacher training programs and to produce more diagnostic teachers and supervisors who have knowledge of test practices and remedial techniques for a broad range of learning disabilities.

Education is being asked to gear up and broaden its understanding to prevent learning disabilities from occurring in the first place.

In the past, youngsters with specific language disability often have not been identified accurately and have been put in special education classes which do not provide programs designed for their needs. It has been even more common for the child to remain in the regular classroom.

Model Program

A model group program specifically designed for the prevention of dyslexia is now under way in Prince Georges county.

The program began with the testing of all children in three large elementary public schools, kindergarten through 6th grade.

Youngsters who showed some of the symptoms of specific language disability on group testing were then given individual reading tests.

Poor performers in reading from the first three grades are now grouped in normal-size classes and are being taught to read, write and spell using essentially a synthesis approach; i.e., a highly structured phonetic approach to the English language taught in the context of the multi-sensory approach (hands, eyes and ears, all learning letters, sounds).

At the outset, teachers received specific instructions in both the nature of the disability and the teaching approach to be used.

The program is now in its second year and results are reported to be particularly promising.

Indications are that children taught by this slower method do not in the end lose ground and they turn out to be a bright, lively and active group. On the other hand, classes from which these youngsters have been removed are no longer handicapped by the presence of poor readers.

Dr. Gilbert B. Schiffman, coordinating director of instruction for Prince Georges county, initiated the program. David Malin, reading specialist, was the coordinator; and Roger Saunders, president of the Orton Society, was the consultant who effected the teacher training.

A film has been produced on this program.

Baltimore County

At Rodgers Forge Elementary School in Baltimore county, a teacher who is specially trained in remedial techniques and materials is assigned as remedial clinician for a half day, every day. In her charge are approximately 10 to 15 children with severe reading problems who are taught according to their needs.

In addition, this school has a special program which is preventive in nature, in which all children in kindergarten and first grade are tested to pick up those with reading disabilities so they can be grouped according to the way they should learn.

Mrs. Frank E. Locke, who is now a diagnostician and resource teacher in Baltimore county, was instrumental in setting up the testing procedures and the methods and materials to be used. Maynard Webster is the principal.

At each grade level there is a special reading class. After the children in these classes are remediated they are placed in the conventional reading program.

"If a child is weak in visual perception," Mrs. Locke explained, he is taught by an auditory modality because he learns more easily this way. The reverse is true if he is weak in auditory skills."

Children in the preventive class start out with cursive writing in the first grade and are taught to read with a synthetic phonics approach which has some variations in it for special problems.

The teacher of the first and second grade preventive classes has the assistance of a resource teacher who serves in an advisory capacity, assists with materials and testing, or works with the children.

Interested parents of youngsters in need of additional help are allowed to come in and receive training in the techniques being used, after which the parent may take the child out of class and work with him alone in a separate room, using materials which have been planned by the classroom teacher.

Similar Programs

In the 4th, 5th and 6th grades, children who have difficulty reading, particularly in the content area, are free to go to listening posts to absorb their lessons from material which has been tape-recorded by interested parents.

Carney, Hillendale and Oakleigh elementary schools have similar preventive and remedial programs.

Carney and Hillendale, this year, have tested all kindergarten and first grade children. Oakleigh, which has been testing on a limited ba-

sis, is now in the process of completing this work and expects to have tests on all first graders and kindergarten children completed by June.

All three schools are using remedial teachers as resource teachers to assist the class teachers and are doing a great deal of work with the language disabled within the regular classrooms.

These are pilot programs, but groups of teachers throughout Baltimore county and Baltimore city, including those in parochial and private schools, are meeting regularly to explore procedures for the teaching of reading to children who have not learned under conventional methods as we know them.

Baltimore city is overwhelmed by sheer numbers and masses of children with all kinds of learning problems, who are in need of help.

Before the city can even discuss its special programs for youngsters with many different types of learning disabilities, it must cope with its 109 corrective reading classes. (And the nine teacher vacancies in these classes which currently cannot be filled because of budget requirements.)

Development In Kind

The corrective reading classes are designed to serve small groups of pupils who need more intensive, somewhat individualized work similar to that in the developmental or regular reading program, and they are not meant to serve the dyslexic child.

But to be eligible to enter the corrective reading program in Baltimore city, a child must be reading two years or more below grade level, and there are children in this program who are four or five years retarded in reading and who now have compounded problems.

"We have been aware, for years, that we are not providing the most effective treatment for many of these children," Mrs. Ida M. Johnson, supervisor of Corrective Reading Services, said recently. "They should be handled in a clinic set up on a one to one basis with supportive assistance from a psychologist and neurologist, but we have never been able to get around to this."

Yet the signs heralding change are unmistakable in the city, too.

Mrs. Helen Vernay, a Baltimore city social worker, has been wroking with a senior teacher and a reading resource teacher at Armistead Gardens Elementary School to set up a model program there for the early identification of the disabled reader.

Mrs. Vernay became concerned that so many children with reading problems were going unnoticed at the Armistead Gardens school until they reached the second or third grade, at which time there was a considerable amount of failure and behavorial problems stemming from the frustrations that failure brings about.

Testing Devices

"We began to try some testing devices," she said, that would give us some indices at the end of kindergarten as to the children's strengths and weaknesses.

"Then we placed the children with visual and auditory disabilities in small groups and tried to use remedial methods that would give them special help. The poorly coordinated child was given remedial exercises in the gym."

This program, still in its first year, has not been evaluated, but Mrs. Vernay says that comments from the regular classroom teachers thus far have been excellent.

"The groups have been very manageable, and the children are no longer acting out their frustations. When the difficulties are pinpointed, and the teachers know what to expect, the children aren't asked to do things they are not able to do.

"And those who are going to be slow readers are getting help before they are actually presented with a reading program."

Working with Mrs. Vernay in effecting this preventive program are Mrs. Mildred Llewellyn, senior teacher for the early level, and Miss Mary Adele Griesacker, reading resource teacher.

DYSLEXIA: What Is It?

New Law Recognizes Learning-Disabled Children As Separate, Identifiable Group

This is the last in a series of nine articles on dyslexia, or specific language disability.

PART IX

By Josephine Novak

April 13, 1970. President Nixon signed into law Public Law 91-230 titled, "The Elementary and Secondary Education Act Amendments of 1969: Title VI, The Education of the Handicapped Act."

Part G, Section 661 of this law authorized a program of grants for special programs for children with specific learning disabilities, including dyslexia. It also authorized $12 million for fiscal year 1970; $20 million for fiscal year 1971; and $31 million for each of the succeeding fiscal years ending prior to July 1, 1973.

Term Defined

Prior to this new law, federal legislation did not recognize learning-disabled children as a separate identifiable grouping. Because it was a new authority, the act defined the handicap as follows:

"The term 'children with specific learning disabilities' means those children who have a disorder of one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations.

"Such disorders include such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia.

"Such term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, of emotional disturbance, or of environmental disadvantage."

P.L. 91-230 authorizes provisions for:

1. Research and related purposes pertaining to the education of children with specific learning disabilities, including proposals which emphasize prevention and early identification.

2. Professional or advanced training of educational personnel who are teaching or are preparing to be teachers of children with specific learning disabilities; or for persons who are, or preparing to be, supervisors and teachers of such personnel.

3. Establishing and operating model centers for the improvement of education of children with specific learning disabilities.

Model Centers

The model centers are to: provide testing and educational evaluation to identify learning disabled children; develop and conduct model programs designed to meet special educational needs of such children; assist appropriate educational agencies or other organizations in making such model programs available and and disseminate new methods or techniques for overcoming learning disabilities.

In addition, the law requires the Commissioner of Education to achieve an equitable geographical distribution of training programs and trained personnel and "to the extent feasible," establish a model center in each state.

While P.L. 91-230 can be viewed as a major step toward improving educational opportunities for children with language difficulties, such changes cannot be expected to occur overnight.

Advising parents on where to apply for aid is still not easy. But wherever a severe reading disorder exists, comprehensive physical and psychological diagnostic examinations are among the first steps to be considered.

Local resources to which a parent may go for help include the Orton Society which recently moved its headquarters from Pomfret, Conn. to Baltimore.

The Orton Society, founded in 1949 and named in honor of Dr. Samuel T. Orton, pioneer in the area of language disorders, is the only national nonprofit organization devoted exclusively to helping children with specific language disability, or dyslexia.

This group offers helpful guidance concerning diagnostic centers, schools, clinics and training programs, and publishes annual bulletins containing recent studies and developments in the field.

Non-Doctrinaire

It does not espouse any particular doctrine or prescribe any system or systems of remedial education. It is committed only to the promotion of study, treatment and prevention of the problems of specific language disability and welcomes to its membership educators, doctors, psychologists, parents—everyone interested in helping children with these problems.

HELP FOR DYSLEXICS—Mrs. John H. Heller discusses information on dyslexia with Roger Saunders, national president of the Orton Society. Mrs. Heller, chairman of the Parents Committee, D. C. area branch of the Society, helped establish an office in Towson.

Roger Saunders, clinical psychologist who heads the graduate reading program at Loyola College as associate professor, is national president of the group. Mrs. Regina Cicci, assistant professor in the Division of Otolaryngology, University Hospital, is president of the D.C. area branch, which includes the Baltimore area.

Mrs. John H. Heller, of Baltimore county, is chairman of the Parents Committee of the D.C. area branch, and in this capacity she was instrumental in staffing an office here with volunteers who are available from 10 A.M. to 4 P.M., Monday through Friday, to offer guidance to parents.

Mailed inquiries to this office should be addressed to: Orton Society, 8415 Bellona Lane, Towson 21204, and accompanied by a stamped, return envelope.

The telephone number is available under a new listing for the Orton Society.

A school-oriented organization which provides a forum for discussion of new ideas and research in the field of reading disabilities is the nonprofit International Reading Association.

IRA Council

The membership of the Baltimore area council of the IRA, which takes in Baltimore city and Baltimore county, is primarily made up of teachers whose special interest is in all areas of reading, but the organization also welcomes parents at its meetings, which are increasingly concerned with materials for helping children with reading difficulties.

Orlan Cowan, supervisor of remedial reading for the Baltimore County Department of Education, is president of the Baltimore area council of the IRA.

Mrs. Frank E. Locke, diagnostician and resource teacher in Baltimore county, is program chairman. Inquiries on meetings may be directed to Mrs. Locke at the Special Education Office, Baltimore County Board of Education.

Parents are cautioned not to purchase any materials pertaining to the teaching of reading, including phonics systems and machines, without first checking with the remedial reading departments of their school districts.

A truly fine aid for the dyslexic child is the recorded book service available from the State Library for the Physically Handicapped and Blind, located at 1715 N. Charles street, Baltimore 21201.

The library furnishes the parent with a form which may be signed by a psychologist, doctor or school diagnostician who has tested the child and can certify him as being dyslexic. The language-disabled adult, of course, may also avail himself of this service, which includes the use of a record player that plays tapes.

Once a month, the library furnishes a list of available tapes or records. It will also send the child tapes pertaining to his special interests and will record school textbooks for him. There is no charge for any part of this service.

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